

**Kansas Department of Health and Environment  
Division of Environment  
Bureau of Air**



**REGULATORY IMPACT STATEMENT CONSISTING OF:**

**I. ENVIRONMENTAL BENEFIT STATEMENT**

**AND**

**II. ECONOMIC IMPACT STATEMENT**

Pursuant to K.S.A. 77-416

**PROPOSED ADOPTION OF NEW AIR QUALITY REGULATION:**

**K.A.R. 28-19-200a**

**PROPOSED AMENDMENT OF EXISTING AIR QUALITY REGULATION:**

**K.A.R. 28-19-350**

August 2010



## Executive Summary

The Kansas Air Quality Act, K.S.A. 65-3001 *et seq.*, authorizes the secretary of the Kansas Department of Health and Environment (KDHE) to develop rules and regulations to conserve air quality and to control air pollution in the state of Kansas. In large part, the Kansas air quality regulatory program implements the requirements of the federal Clean Air Act, 42 U.S.C. §7401 *et seq.*, as a state program pursuant to the Kansas State Implementation Plan (SIP) approved by the United States Environmental Protection Agency (USEPA). Upon adoption of the proposed amendments, KDHE will submit a revised SIP to the USEPA for approval.

The proposed new regulation K.A.R. 28-19-200a and the proposed amendment to K.A.R. 28-19-350 will align the Kansas Air Quality Regulations with the revised federal regulations for the Title V and Prevention of Significant Deterioration (PSD) programs respectively to implement the federal Tailoring Rule. Specifically, KDHE is proposing these regulatory actions to expedite the permitting and potential construction of facilities in Kansas.

This Regulatory Impact Statement, consisting of an Environmental Benefit Statement and Economic Impact Statement, is submitted in support of the proposed regulatory actions.

## Background

On April 2, 2007, the Supreme Court found that greenhouse gases (GHGs), including carbon dioxide, are air pollutants covered by the Clean Air Act (CAA) *Massachusetts v. EPA*, 549 U.S. 497 (2007). The Court found that the USEPA was required to determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In April 2009, the USEPA responded to the Court by proposing a finding that greenhouse gases contribute to air pollution that may endanger public health or welfare. On December 7, 2009, the Administrator signed two distinct findings regarding GHG under section 202(a) of the CAA:

- **Endangerment Finding:** The Administrator found that the current and projected atmospheric concentrations of the six, key, well-mixed GHGs— carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>) --threaten the public health and welfare of current and future generations.

▪ **Cause or Contribute Finding:** The Administrator found that the combined emissions of these GHGs from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

These findings, which were published December 15, 2009, do not impose any requirements on industry or other entities. However, they were a prerequisite to finalizing the GHG standards for light-duty vehicles.

On December 18, 2008, the USEPA issued a guidance document, "EPA's Interpretation of Regulations that Determine Pollutants Covered by Federal Prevention of Significant Deterioration (PSD) Permit Program". Whether a pollutant is "subject to regulation" is important for the purposes of determining whether it is covered under the CAA permitting programs. The guidance document established that a pollutant is "subject to regulation" only if it is subject to either a provision in the CAA or regulation adopted by the USEPA under the CAA that requires actual control of emissions of that pollutant. On February 17, 2009, the USEPA granted a petition for reconsideration of this guidance document.

On March 29, 2010, the Administrator signed a notice conveying the agency's decision to continue applying the PSD Interpretive Memo's interpretation of "subject to regulation." The final rule was published in the *Federal Register* on April 2, 2010. The USEPA concluded that the "actual control interpretation" is the most appropriate interpretation. The agency established that CAA permitting requirements apply to a newly regulated pollutant at the time a regulatory requirement to control emissions of that pollutant "takes effect" (rather than upon promulgation or the legal effective date of the regulation containing such a requirement). Based on the anticipated promulgation of the light duty vehicle rule, the notice stated that the GHG requirements of the vehicle rule would trigger CAA permitting requirements for stationary sources on January 2, 2011.

On April 1, 2010, the USEPA finalized the light duty vehicle rule controlling GHG emissions. This rule confirmed that January 2, 2011 is the earliest date that a 2012 model year vehicle meeting these rule requirements may be sold in the United States.

On May 13, 2010, the USEPA issued a final rule that adds thresholds for greenhouse gas (GHG) emissions to their regulations that define when permits under the New Source Review (NSR) Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities. The final rule "tailors" the requirements of these Clean Air Act (CAA) permitting programs to limit which facilities will be required to obtain PSD and Title V permits and establishes requirements for state air quality programs to

implement the federal regulation. The final rule was published in the Federal Register on June 3, 2010 with an effective date of August 2, 2010.

The existing emissions thresholds in the permitting program for criteria pollutants (sulfur dioxide, nitrogen dioxide, etc.) are 100 and 250 tons per year (tpy). While these thresholds are appropriate for criteria pollutants, they are not feasible for GHGs because GHGs are emitted in much higher amounts. Without this Tailoring Rule, the lower emissions thresholds would take effect automatically for GHGs on January 2, 2011. PSD and Title V requirements at these thresholds would lead to dramatic increases in the number of required permits —tens of thousands of PSD permits and millions of Title V permits. State, local, and tribal permitting authorities would be overwhelmed and the programs’ abilities to manage air quality would be severely impaired.

In the final tailoring rule the USEPA requests that states submit information to the appropriate EPA Regional Administrator by August 2, 2010 to determine if it is necessary to finalize their proposed limited approvals for SIP-approved PSD and part 70 Title V state programs. In the letter, states should explain whether they will apply the meaning of the term “subject to regulation” established by the USEPA in this action in implementing both their PSD and part 70 Title V permitting programs, and if so, whether the state intends to undergo a regulatory or statutory revision. If a state must revise its statutes or regulations to implement this rule, they should also provide an estimate of the time to adopt final rules. It was determined that Kansas would require a regulatory change to implement the final tailoring rule; this proposed amendment and new rule are intended to fulfill this requirement.

The USEPA has stated their intent to propose an implementation rule to address States which fail to meet the January 2, 2011 effective date to regulate GHGs under the PSD and Title V programs. As of July 15, 2010, the USEPA has not promulgated this proposed implementation rule; however they have projected an August 2010 proposed rule date and a December 2010 final rule date. This information concerning potential consequences (SIP call or Federal Implementation Plan (FIP)) is speculative until the USEPA promulgates a proposed rule.

### **New Source Review and Title V Program Review**

Congress established the NSR program as part of the 1977 Clean Air Act Amendments and modified it in the 1990 Amendments. NSR is a preconstruction permitting program that serves two important purposes:

1. Ensures that air quality is not significantly degraded from the addition of new and modified factories, industrial boilers and power plants. In areas with unhealthy air, NSR assures that new emissions do not slow progress toward cleaner air. In areas with clean air, especially pristine areas like national parks, NSR assures that new emissions do not significantly worsen air quality.
2. The NSR program assures people that any large new or modified industrial source in their neighborhoods will be as clean as possible, and that advances in pollution control occur concurrently with industrial expansion.

New major stationary sources and major modifications at existing major stationary sources that meet emissions applicability thresholds outlined in the CAA and in existing PSD regulations must obtain a PSD permit outlining how they will control emissions. The permit requires facilities to apply best available control technology (BACT), which is determined on a case-by-case basis taking into account, among other factors, the cost and effectiveness of the control.

The 1990 Amendments required that all states develop operating permit programs. Under these programs, known as Title V Operating Permits programs, every major industrial source of air pollution (and some other sources) must obtain an operating permit. The permits, which are renewed every 5 years, contain all air emission control requirements that apply to the facility, including the requirements established as part of the preconstruction permitting process.

## **I. Environmental Benefit Statement**

### **1) Need for proposed amendments and environmental benefit likely to accrue.**

#### **a) Need**

This regulatory action is needed so that the state of Kansas retains the primary authority to implement the PSD and Title V programs and retains the ability to issue permits for both programs. KDHE's goal has long been to provide regulatory certainty and flexibility to industry in Kansas by having primacy over both the Title V and PSD program. States which do not meet the implementation date and SIP submittal date of January 2, 2011 may be subject to a SIP call and/or a FIP by the USEPA. Furthermore one consequence to not meeting the submittal date is a potential construction ban in Kansas. This could mean that no PSD or Title V permits will be issued for industry in Kansas until such time that the USEPA imposes a FIP or approves an

amended SIP for the implementation of the Tailoring Rule. KDHE anticipates, based on communications with the National Association of Clean Air Agencies (NACAA) and the USEPA, that a rule to clarify this matter will be proposed in the next few months.

**b) Environmental benefit**

The tailoring rule relies on the technical support document (TSD) for the endangerment finding final rule to provide a detailed explanation of greenhouse gases, climate change and its impact on health, society, and the environment (Docket ID No. EPA-HQ-OAR-2009-0472-11292). The TSD provides technical support for the endangerment and cause or contribute analyses concerning greenhouse gas (GHG) emissions under section 202(a) of the Clean Air Act. The conclusions and the information throughout the TSD are primarily drawn from the assessment reports of the Intergovernmental Panel on Climate Change (IPCC), the U.S. Climate Change Science Program (CCSP), the U.S. Global Change Research Program (USGCRP), and the National Research Council (NRC).

Kansas is making its incremental contribution to address GHG emissions by the implementation of this permitting program required by the USEPA.

**2) When applicable, a summary of the research indicating the level of risk to the public health or the environment being removed or controlled by the proposed rules and regulations or amendment.**

The IPCC *Fourth Assessment Report: Climate Change 2007* states that the observational evidence from all continents and most oceans shows that many natural systems are being affected by regional climate changes, particularly temperature increases. A global assessment of data since 1970 has shown it is likely that anthropogenic warming has had a discernible influence on many physical and biological systems. Other effects of regional climate changes on natural and human environments are emerging, although many are difficult to discern due to adaptation and non-climatic drivers (IPCC).

The Administrator made the endangerment finding based on both current observations and projected risks and impacts into the future. Furthermore, the Administrator based the endangerment finding on impacts of climate change within the United States. However, the Administrator found that when considering the impacts on the U.S. population of risks and

impacts occurring in other world regions, the case for endangerment to public health and welfare is only strengthened.

- 3) If specific contaminants are to be controlled by the proposed regulations or amendment, a description indicating the level at which the contaminants are considered harmful according to current available research.**

Non applicable, these regulations are being promulgated to address the permitting thresholds for GHGs and do not directly establish emissions limits for GHGs.

## **II. Economic Benefit Statement**

- 1) Are the proposed regulations or amendments mandated by federal law as a requirement for participating in or implementing a federally subsidized or assisted program?**

Yes. KDHE's authority to fully implement the Clean Air Act programs, which are in part funded through grants from the USEPA, is maintained by assuring that all state program elements are current and consistent with the terms of the federal requirements that KDHE implements.

- 2) Do the proposed amendments exceed the requirements of applicable Federal law?**

No, these changes update the state regulations specifically to match the federal requirements of the *Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule* promulgated by the USEPA on June 3, 2010.

- 3) Description of costs to agencies, to the general public and to persons who are affected by, or are subject to, the regulations:**

- a) Capital and annual costs of compliance with the proposed amendments and the persons who will bear those costs.**

The USEPA's Regulatory Impact Analysis (RIA) examines the benefits, costs, and economic impacts of the Final Prevention of Significant Deterioration and Title V Greenhouse



Gas Tailoring Rule for affected entities and society as a whole. The tailoring rule lifts, for a period of beginning January 2, 2011 through April 30, 2016 (referred to as phase-in period), the burden to obtain a Title V operating permit required by the Clean Air Act (CAA or Act) for many small existing sources of greenhouse gas (GHG) and the burden of Prevention of Significant Deterioration (PSD) requirements for small new or modifying sources of GHG. Thus, the rule may be viewed as providing regulatory relief rather than regulatory requirements for these smaller GHG sources for a period of at least the phase-in period. For larger sources of GHG, there are no direct economic burdens or costs as a result of this rule, because requirements to obtain a Title V operating permit or to adhere to PSD requirements of the CAA are already mandated by the Act and by existing rules and are not imposed as a result of this rulemaking.

**b) Initial and annual costs of implementing and enforcing the proposed amendments, including the estimated amount of paperwork, and the state agencies, other governmental agencies or other persons or entities who will bear the costs.**

Estimated costs to implement and enforce the addition of GHG to the PSD and Title V program are projected to include two additional full-time employees. The positions will be funded with the Air Quality Fee Fund. This fund receives payments from large industrial sources of air pollution based upon their annual emissions of pollutants.

	Standard cost/person	Number	FY10
<b>Salaries and Wages By Classifications</b>			
Professional Environmental Engineer I		1	69,784
Engineering Associate III		1	57,429
Fringe Benefits		2	38,164
<b>Salaries and Wages</b>			<b>\$165,377</b>
Communications			6,000
Travel/Training			8,000
<b>Total Contractual Services</b>			<b>\$14,000</b>
Professional Supplies			4,000
Stationary and Office Supplies			1,000
<b>Total Commodities</b>			<b>\$5,000</b>
<b>Capital Outlay (please list)</b>			
Desktop computer	1,500	2	3,000
Office Furniture	2,000	2	4,000
<b>Capital Outlay</b>			<b>\$7,000</b>
<b>TOTAL EXPENDITURES</b>			<b>\$191,377</b>

- c) **Costs which would likely accrue if the proposed regulations are not adopted, the persons who will bear the costs and those who will be affected by the failure to adopt the regulations.**

If the proposed changes are not adopted, the USEPA will impose federal requirements without the involvement of KDHE.

Again, this regulatory action is needed so that the state of Kansas retains the primary authority to implement the PSD and Title V programs and retains the ability to issue permits for both programs. KDHE's goal has long been to provide regulatory certainty and flexibility to industry in Kansas by having primacy over both the Title V and PSD program. If Kansas does not adopt the proposed amendment to K.A.R. 28-19-350 and new K.A.R. 28-19-200a, KDHE may lose the primary authority to implement both the Title V and PSD programs for GHGs. Affected sources in Kansas could then be subject to a construction ban or may have to rely on the USEPA to issue their Title V or PSD permits in an unspecified timeframe.

**d) A detailed statement of the data and methodology used in estimating the costs used in the statement.**

The major costs are to the regulated industry, and these costs will be present regardless of whether the proposed new regulations are passed. The USEPA's regulatory impact analysis (RIA) conducted for the final federal rule provides details of the benefits or regulatory relief that smaller GHG sources will experience in terms of costs avoided as a result of the final rule and the potential for social costs in terms of foregone environmental benefits during the 6-year period. Complete details of the USEPA's RIA conducted for the final rule may be found in the document "Regulatory Impact Analysis for the Final Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule," (Docket ID No. EPA-HQ-OAR-2009-0517-19161).

The estimated agency costs were developed by KDHE staff using existing budget and salary assumptions.

**e) Description of any less costly or less intrusive methods that were considered by the agency and why such methods were rejected in favor of the proposed regulations.**

No other methods were considered by the agency to regulate GHG in Kansas. This proposed regulatory action is to implement the federal tailoring rule and retain authority for the PSD and Title V permitting programs.

**f) Consultation with League of Kansas Municipalities, Kansas Association of Counties, and Kansas Association of School Boards.**

Copies of this Regulatory Impact Statement and the proposed regulatory action have been provided to these organizations for their review as required by K.S.A. 77-416.